Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-36. (Cancelled).

37. (Currently Amended) A method of automatically adjusting a fragmentation threshold for data transmissions between an access point and one or more associated wireless units, comprising:

determining a transmission error factor indicative of errors occurring in a transmission of one or more data packets between the access point and the one or more associated wireless units, the transmission error factor being a weighted value with transmission errors occurring successively having a greater weighting than transmission errors occurring sporadically; and

automatically adjusting the fragmentation threshold based on the transmission error factor after translating a desired finite time duration for the transmission into the fragmentation threshold based ~~of~~ on a data transmission rate of at least one data packet following the one or more data packets.

38. (Previously Presented) The method of claim 37, wherein the determining of the transmission error factor comprises:

transmitting the one or more data packets; and

determining the transmission error factor based on a number of acknowledgement packets received in response to the transmitted one or more data packets.

39. (Previously Presented) The method of claim 37, wherein the transmission error factor is based on a number of errors occurring in the transmission of the one or more data packets.

40.   (Currently Amended) The method of claim 37, wherein the transmission error factor is a value being a ~~sum~~ function of (i) a number of transmission errors occurring successively multiplied by a first ~~weighing~~weighting factor and (ii) a number of transmission errors occurring sporadically multiplied by a second ~~weighing~~weighting factor, the first ~~weighing~~weighting factor being greater than the second ~~weighing~~weighting factor.

41.   (Cancelled).

42.   (Previously Presented) The method of claim 37, wherein automatically adjusting the fragmentation threshold comprises:

comparing the transmission error factor to an upper threshold; and

decreasing the finite time duration by decreasing the fragmentation threshold if the transmission error factor is above the upper threshold.

43.   (Previously Presented) The method of claim 37, wherein automatically adjusting the fragmentation threshold comprises:

comparing the transmission error factor to a lower threshold; and

increasing the finite time duration by increasing the fragmentation threshold if the transmission error factor is below the lower threshold.

44.   (Previously Presented) The method of claim 37, wherein automatically adjusting the fragmentation threshold comprises:

comparing the transmission error factor to an upper threshold;

decreasing the finite time duration by decreasing the fragmentation threshold if the transmission error factor is above the upper threshold;

comparing the transmission error factor to a lower threshold; and

increasing the finite time duration by increasing the fragmentation threshold if the transmission error factor is below the lower threshold.

45.   (Previously Presented) The method of clam 37, wherein automatically adjusting the fragmentation threshold comprises changing the fragmentation threshold by a divisional factor each time the fragmentation threshold is adjusted, the fragmentation threshold being based on a pre-determined fragmentation threshold divided by the divisional factor.

46.   (Previously Presented) The method of claim 45, wherein the pre-determined fragmentation threshold is a maximum data packet size for transmission over a backbone network of a wireless network formed by the access point and the one or more associated wireless units.

47.   (Previously Presented) The method of claim 45, wherein the pre-determined fragmentation threshold is related to a maximum data packet size for transmission over a wireless medium operating as a wireless communication path between the access point and the one or more associated wireless units.

48.   (Currently Amended) Adapted to communicate with one or more associated wireless units, an access point comprising a logic circuit to:
        determine a transmission error factor indicative of errors occurring in a transmission of a first group of data packets to the one or more associated wireless units, the transmission error factor being a weighted value with transmission errors occurring successively having a different weighting than transmission errors experienced by the first group of data packets occurring sporadically; and
        automatically adjust the fragmentation threshold based on the transmission error factor after translating a desired finite time duration for the transmission into the fragmentation threshold based of a data transmission rate of a second group of data packets following the first group of data packets.

49.   (Previously Presented) The access point of claim 48, wherein the logic circuit in determining the transmission error factor is capable of:

transmitting the first group of data packets to the one or more associated wireless units; and

determining the transmission error factor based on a number of acknowledgement packets received in response to the transmitted the first group of data packets from the one or more associated wireless units.

50.   (Previously Presented) The access point of claim 48, wherein the transmission error factor depends on a number of errors occurring in the transmission of the first group of data packets.

51.   (Currently Amended) The access point of claim 48, wherein the transmission error factor is a value being a ~~sum~~ function of (i) a number of transmission errors occurring successively for the first group of data packets multiplied by a first ~~weighing~~weighting factor and (ii) a number of transmission errors occurring sporadically for the first group of data packets multiplied by a second ~~weighing~~weighting factor.

52.   (Currently Amended) The access point of claim 48, wherein the transmission error factor is a weighted value with the transmission errors occurring successively having a greater ~~weighing~~weighting than transmission errors experienced by the first group of data packets ~~occurs~~ occurring sporadically.

53.   (Previously Presented) The access point of claim 48, wherein the logic circuit in automatically adjusting the fragmentation threshold is capable of:
        comparing the transmission error factor to an upper threshold; and
        decreasing the finite time duration by decreasing the fragmentation threshold if the transmission error factor is above the upper threshold.

54.   (Previously Presented) The access point of claim 48, wherein the logic circuit in automatically adjusting the fragmentation threshold is capable of:

comparing the transmission error factor to a lower threshold; and

increasing the finite time duration by increasing the fragmentation threshold if the

transmission error factor is below the lower threshold.

55.   (Previously Presented) The access point of claim 48, wherein the logic circuit in

automatically adjusting the fragmentation threshold changes the fragmentation threshold by a

divisional factor each time the fragmentation threshold is adjusted, the fragmentation threshold

being based on a pre-determined fragmentation threshold divided by the divisional factor.

56.   (Previously Presented) The access point of clam 55, wherein the pre-determined

fragmentation threshold is a maximum data packet size for transmission over a backbone

network of a wireless network formed by the access point and the one or more associated

wireless units.

57.   (Currently Amended) A method of automatically adjusting a fragmentation

threshold for data transmissions between an access point and at least one wireless unit,

comprising:

determining a transmission error factor indicative of errors occurring in a transmission of

one or more data packets between the access point and the at least one wireless unit, the

transmission error factor being a weighted value with transmission errors occurring successively

having a different weighting than transmission errors experienced by the first group of data

packets occurring sporadically; and

adjusting the fragmentation threshold based on the transmission error factor after

translating a desired finite time duration for the transmission into the fragmentation threshold

based of a transmission rate of at least one data packet following the one or more data packets.

58.   (Previously Presented) The method of claim 57, wherein the determining of the

transmission error factor comprises:

transmitting the one or more data packets; and

determining the transmission error factor based on a number of acknowledgement packets received in response to the transmitted one or more data packets.

59.   (Previously Presented) The method of claim 57, wherein the transmission error factor is based on a number of errors occurring in the transmission of the one or more data packets.

60.   (Currently Amended) The method of claim 57, wherein the transmission error factor is a value being a ~~sum~~ function of (i) a number of transmission errors occurring successively multiplied by a first ~~weighing~~weighting factor and (ii) a number of transmission errors occurring sporadically multiplied by a second ~~weighing~~weighting factor, the first ~~weighing~~weighting factor being greater than the second ~~weighing~~weighting factor.

61.   (Currently Amended) The method of claim 57, wherein the transmission error factor is a weighted value with transmission errors occurring successively to each other having a greater ~~weighing~~weighting than transmission errors occurring sporadically.

62.   (Previously Presented) The method of claim 57, wherein automatically adjusting the fragmentation threshold comprises:
comparing the transmission error factor to an upper threshold; and
decreasing the finite time duration by decreasing the fragmentation threshold if the transmission error factor is above the upper threshold.

63.   (Previously Presented) The method of claim 57, wherein automatically adjusting the fragmentation threshold comprises:
comparing the transmission error factor to a lower threshold; and
increasing the finite time duration by increasing the fragmentation threshold if the transmission error factor is below the lower threshold.

64.   (Previously Presented) The method of clam 57, wherein automatically adjusting the fragmentation threshold comprises changing the fragmentation threshold by a divisional factor each time the fragmentation threshold is adjusted, the fragmentation threshold being based on a pre-determined fragmentation threshold divided by the divisional factor.

65.   (Previously Presented) The method of claim 64, wherein the pre-determined fragmentation threshold is a maximum data packet size for transmission over a backbone network of a wireless network formed by the access point and the one or more wireless units.

66.   (Currently Amended) A method of automatically adjusting a fragmentation threshold for data transmissions between an access point and a plurality of wireless units via a wireless medium associated with a wireless network, comprising:

determining a transmission error factor indicative of errors occurring in a transmission of one or more data packets between the access point and the plurality of wireless units, the transmission error factor being a weighted value with transmission errors occurring successively having a different weighting than transmission errors experienced by the first group of data packets occurring sporadically;

translating a targeted finite time duration for the transmission into the fragmentation threshold; and

automatically adjusting the fragmentation threshold based on the transmission error factor and a change in a data rate of a transmission of at least one data packet following the one or more data packets.

67.   (Currently Amended) An access point, adapted to communicate with at least one wireless unit via a wireless medium to provide the at least one wireless unit access to a wireless network, comprising:

a wireless transceiver; and

a logic circuit to (i) determine a transmission error factor indicative of errors occurring in a transmission of one or more data packets between the access point and the at least one wireless unit, the transmission error factor being a weighted value with transmission errors occurring

successively having a different weighting than transmission errors experienced by the first group of data packets occurring sporadically, and (ii) adjust the fragmentation threshold based on the transmission error factor after translating a desired finite time duration for the transmission into the fragmentation threshold based of a transmission rate of at least one data packet following the one or more data packets.

68.   (Currently Amended) The access point of claim 67, wherein the logic circuit to determine the transmission error factor by computing a weighted value with transmission errors occurring successively having a greater ~~weighing~~weighting than transmission errors experienced by the one or more packets occurring sporadically.

69.   (Previously Presented) The access point of claim 67, wherein the logic circuit in adjusting the fragmentation threshold changes a divisional factor each time the fragmentation threshold is adjusted, the fragmentation threshold being based on a pre-determined fragmentation threshold divided by the divisional factor.